

# SCIENCE

Published by the **American Association for the Advancement of Science (AAAS)**, *Science* serves its readers as a forum for the presentation and discussion of important issues related to the advancement of science, including the presentation of minority or conflicting points of view, rather than by publishing only material on which a consensus has been reached. Accordingly, all articles published in *Science*—including editorials, news and comment, and book reviews—are signed and reflect the individual views of the authors and not official points of view adopted by the AAAS or the institutions with which the authors are affiliated.

The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objectives are to further the work of scientists, to facilitate cooperation among them, to foster scientific freedom and responsibility, to improve the effectiveness of science in the promotion of human welfare, to advance education in science, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.

## Membership/Circulation

**Director:** Michael Spinella  
**Deputy Director:** Marlene Zendell  
**Member Services:** Rebecca Dickerson, *Manager*; Mary Curry, *Supervisor*; Pat Butler, Helen Williams, Laurie Baker, *Representatives*  
**Promotions:** Dee Valencia, *Manager*; Hilary Baar, Angela Mumeka, *Coordinators*  
**Research:** Kathleen Markey, *Manager*; Robert Smariga, *Assistant*  
**Financial Analyst:** Jacquelyn Roberts  
**Administrative Assistant:** Nina Araujo de Kobes  
**Science Member Services**  
 Marion, Ohio: 800-347-6969;  
 Washington, DC: 202-326-6417  
**Other AAAS Programs:** 202-326-6400

## Advertising and Finance

**Associate Publisher:** Beth Rosner  
**Advertising Sales Manager:** Susan A. Meredith  
**Recruitment Advertising Manager:** Janis Crowley  
**Advertising Business Manager:** Deborah Rivera-Wienhold  
**Finance:** Randy Yi, *Senior Analyst*; Shawn Williams, *Analyst*  
**Marketing:** John Meyers, *Manager*; Allison Pritchard, *Associate*  
**Traffic Manager:** Tina Turano  
**Recruitment:** Michele Pearl, *Operations Manager*; Dan Moran, *Traffic Manager*; Debbie Cummings, Celeste Wakefield, Angela Wheeler, *Sales*  
**Reprints Manager:** Corrine Harris  
**Permissions Manager:** Arlene Ennis  
**Sales Associate:** Carol Maddox

**ADVERTISING SALES:** East Coast/E. Canada: Richard Teeling, 201-904-9774, FAX 201-904-9701 • **Southeast:** Mark Anderson, 305-856-8567, FAX 305-856-1056 • **Midwest:** 202-326-6741 • **West Coast/W. Canada:** Neil Boylan, 415-673-9265, FAX 415-673-9267 • **UK, Scandinavia, France, Italy, Belgium, the Netherlands:** Andrew Davies, (44) 457-838-519, FAX (44) 457-838-898 • **Germany/Switzerland/Austria:** Tracey Peers, (44) 270-760-108, FAX (44) 270-759-597 • **Japan:** Mashu Yoshikawa, (3) 3235-5961, FAX (3) 3235-5852  
**Recruitment:** 202-326-6555, FAX 202-682-0816  
**European Recruitment:** AnneMarie Vis, (44) 0223-302067, FAX (44) 0223-302068  
**Australia/New Zealand Recruitment:** Keith Sandell, (61) 02-922-2977, FAX (61) 02-922-1100  
 Send materials to *Science* Advertising, 1333 H Street, NW, Washington, DC 20005.

**Information for Contributors** appears on pages 37–39 of the 7 January 1994 issue. Editorial correspondence, including requests for permission to reprint and reprint orders, should be sent to 1333 H Street, NW, Washington, DC 20005.

**Internet addresses:** science\_editors@aaas.org (for general editorial queries); science\_letters@aaas.org (for letters to the editor); science\_reviews@aaas.org (for returning manuscript reviews)

# LETTERS

## ORI and Misconduct Investigations

The strong public support of biomedical research has been tested at times by serious allegations of misconduct by scientists conducting this critical research. These accusations of cheating (fabricating data, falsifying results, plagiarizing, and other dishonest types of behavior in conducting research) resulted in the Public Health Service (PHS) establishing the Office of Research Integrity to deal with these issues.

The Office of Research Integrity (ORI) was established independent of the agencies that fund research and further strengthened by federal law so that it could deal independently and fairly with the myriad of issues, allegations, and concerns about the integrity of research funded by the PHS.

Christopher Anderson's 7 January article (News & Comment, p. 20) discusses criticisms of the office, mostly due to the results of the Gallo and Popovic cases. Although these cases enjoyed considerable notoriety, they are only 2 of the 22 cases in which ORI has found misconduct, 16 of which have been sustained. Even more important (to put these cases in context) is the fact that it was ORI that established the hearing process in response to concerns of the scientific community. While losing is never pleasant, it would be difficult to believe in an adjudication process that decided all cases as "guilty as charged."

Many believe that we should not have pursued these cases. Had we not, the allegations as well as the scientific and legal issues raised in this process would not have been aired. The only way to deal with issues and problems is to confront them and bring them to resolution. I think the results of these cases are most significant in that they crystallized a number of issues, especially materiality and intent. We will be dealing with these issues in a number of ways, most notably through the new, statutorily mandated Commission on Research Integrity that will be fully operational in the near future and through the public rule-making process.

My chief concern about the Gallo and Popovic cases is that the media focus on them tended to obscure the broader, and probably more important, ORI mandate to see that all universities and other research institutions have in place an appropriate process to deal with accusations of misconduct in research funded by the PHS. The size and scope of the research effort make it critical that each institution be prepared to

deal properly and effectively with such issues. Furthermore, those actually conducting research at individual institutions must take the lead in fostering integrity in research and dealing with misconduct. Within the limits of its budget, ORI supplements these "local" efforts with its own outreach and educational efforts, including an annual report and quarterly newsletter.

Neither ORI nor the scientific community can be thin-skinned or reluctant to deal with critical issues in a rational, straightforward manner. ORI will attempt to be as open, as ready for the rough-and-tumble of discussion and debate, and as fair to scientists and the public as possible. We seek to win no popularity contests with any part of the broad communities with which we deal. We do seek fairness and full public airing of issues and problems.

**Lyle W. Bivens**

*Director, Office of Research Integrity,  
Public Health Service,  
Department of Health and Human Services,  
Rockville, MD 20852*

## Incorporating Minorities in Science

In the article by Karen Fox "A guide to minority aid from scientific societies" (Minorities in Science, 12 Nov., p. 1134), the American Society for Biochemistry and Molecular Biology (ASBMB) was cited as one of several societies that "offer no programs for minorities," thus characterizing it as one that does "the least . . . for minority students and scientists." These statements are incorrect. The ASBMB Council has been consistent in its support and generous in its allocation of resources for such efforts.

First, our standing Committee for Equal Opportunities for Minority Groups has sponsored programs and workshops at national meetings for about two decades. Second, 10 years ago, ASBMB pioneered the High School Teacher Research Fellowship Program, now also offered by other professional organizations. This program has as one of its top priorities the participation of teachers who are members of a minority group, or whose classes are largely made up of minority students. Up to 20% of the participants fit this description. Third, ASBMB organized groups of minority high school teachers in cities where its national meetings were held (some 80 teachers total) and provided 3 days of activities including